

Acne vulgaris treated with isotretinoin in patients with inflammatory bowel disease, a single-center retrospective study



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Background

- Oral isotretinoin stands as the primary treatment for severe acne vulgaris (AV).¹
- Both AV and isotretinoin have been associated with inflammatory bowel disease (IBD).^{2,3}
- Limited research exists on the impact of isotretinoin on pre-existing IBD. ³⁻⁵
- This study aims to explore the connection between isotretinoin use and IBD flares in patients with both IBD and AV.³⁻⁵

Methods

- IRB-approved retrospective review of patients with IBD and AV conducted at NYU Langone Health (2008-2023).
- Inclusion criteria: ICD-10 codes for IBD and AV, documented isotretinoin use.
- An IBD flare was defined as a new corticosteroid requirement, advanced IBD therapy addition/escalation, or IBD-related hospitalization.
- Data collection included demographics, isotretinoin regimen, IBD characteristics, and disease activity.
- Patients acted as their own controls, comparing flares 2 years before and after isotretinoin exposure.
- Flare episodes were compared using Fisher's Exact Test.

Table 1. Patient Demographics

Variables	No. (%)
Sex	Cases (n = 10)
Male	8 (80)
Female	2 (20)
Age at IBD diagnosis, mean (SD)	16.7 (5.9)
Age at initial isotretinoin exposure, mean (SD)	28.0 (7.7)
Race	
White	8 (80)
Not reported	2 (20)
Type of IBD	
Ulcerative colitis	4 (40)
Crohn's disease	6 (60)
Total cumulative isotretinoin dose (mg/kg), mean (SD, range)	152.0 (75.2, 246.6)

Table 2. IBD Flare Episodes in Relation to Isotretinoin Exposure

Patient (n=10)	Total IBD Flare Episodes (n=13)	Flare occurrence in relation to isotretinoin exposure		
		Before	During	After
1	7	2	3	2
2	-	-	-	-
3	-	-	-	-
4	1	-	-	1
5	-	-	-	-
6	3	1	2	-
7	2	2	-	-
8	-	-	-	-
9	-	-	-	-
10	-	-	-	-

Results

- Ten patients underwent 10 isotretinoin (ISO) courses; 40% had UC, and 60% had CD.
- No association between ISO exposure and IBD flares was found ($p=0.183$).
- Isotretinoin flares during or after treatment did not have a higher risk of needing advanced therapy or hospitalization compared to those with a history of flares before isotretinoin exposure.

Conclusion

- No association was found between isotretinoin use and IBD flares, indicating it may be a safe and effective treatment option.
- More research is needed to understand the connection between IBD and isotretinoin, especially with IBD prevalence rising.²
- Limitations include a small sample size.

References

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